



#### business systems modernization

#### delivering 21st century logistics



#### A Briefing to the Army Science Board

Mr. Jim Kimberly Business Systems Modernization (J-622) Information Operations james-kimberly@hq.dla.mil





- The BSM Program
- Business Process Reengineering
- Technical Solution
- Integrated Data Environment (IDE)



# BSM Will Enable DLA To ...

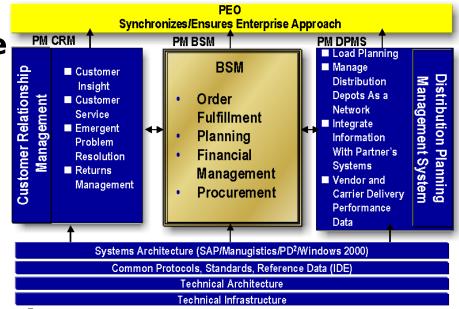
- Replace Legacy Systems with commercial-off-the-shelf (COTS) software
- Reengineer by fielding Best Practices
- Improve customer service by collaborating with customers
- Provide Best Value Solutions
- Provide the training, experience, and opportunity to succeed

<u>An "Agile</u> <u>Infrastructure"</u> "The adoption, within the DoD, of the best practices of the commercial market place, resulting in continuously improving logistics operations, cost savings/avoidance, and process cycle reductions." The BSM Vision DLA's mission-critical legacy systems are replaced with a new enterprise IT environment based on COTS software and best commercial practices



# The BSM Strategy...

- BSM Program: Supply (Less Energy)
  - Class I (Subsistence)
  - Class II (Clothing and Te
  - Class IV (Construction)
  - Class VIII (Medical)
  - Class IX (Repair Parts)
- Beyond the BSM Program:
  - Customer Relationship Management
  - Distribution Planning Management System
  - Map Mission COTS Project
  - Defense Reutilization and Marketing Service Integration Project
- Other Major Related Efforts
  - Catalog Reengineered System (CRS)
  - Engineering Support Automation (ESA)
- PM 036 12 Fuels Automated System (FAS)





BSM ... How We Got Here ...

Jul 98 SAMMS Re-Host eliminated as an option

Sep 98ModernizationExecutive Board chartered



- Sep 98-Jan 99Course of ActionAnalysis
- Jan 99 <u>Decision Point</u> Fundamental Change Option

Apr 99-Jul 99 Process Mapping/Requirements Decomposition



## BSM ... How We Got Here... (Continued)

**Aug 99 Decision Point**— **COTS** solution **Sep 99-Dec 99** Requirements Refinement **Need was approved** 23 Nov 99 as valid by Joint **Chiefs of Staff Operational Requirement** 18 Jul 00 Approved 01 Aug 00 **Approval to enter** Concept



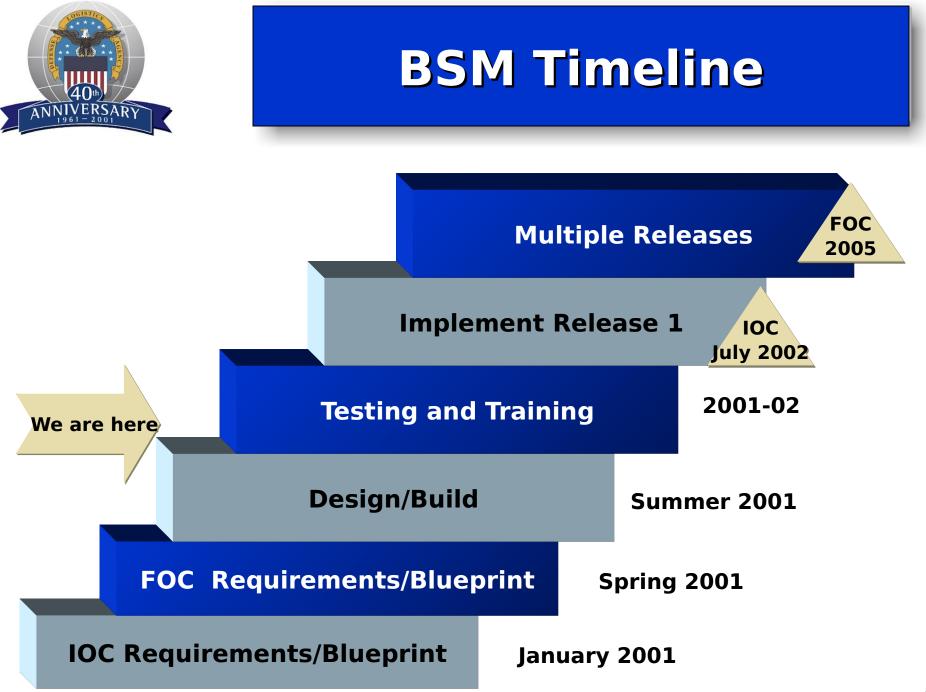
BSM Acquisition Strategy

- Use of GSA Federal Supply Schedule contracts to obtain a total services and supply solution
- Targeted sourcing based on capability and experience with large, complex implementation and integration projects involving COTS ERP software
- Interaction with industry to finalize requirements and evaluation criteria
- Best value award



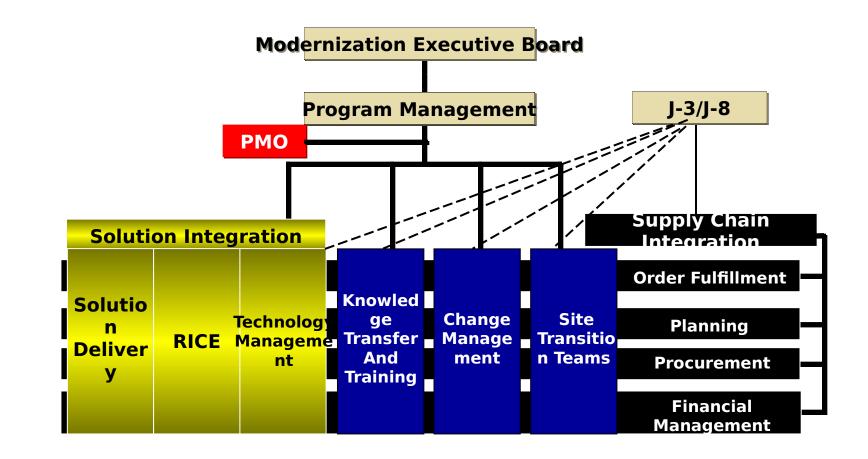
# Critical Success Factors

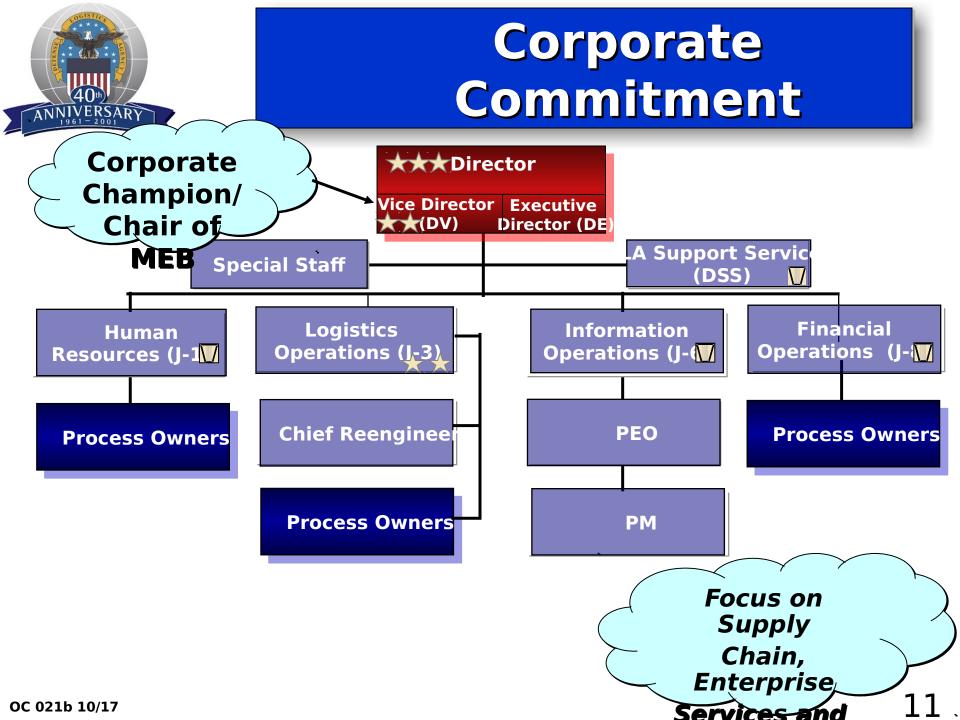
- Key Performance Parameters and Key Performance Indicators (KPPs and KPIs) are met
- New business processes are in place and working
- Technology platform is stable and system meets availability requirements
- Users are able to do their jobs properly and effectively
- Customers are satisfied and able to use the system
  - There is a smooth transition to production





### How We Do Jum Integrated Product Teams





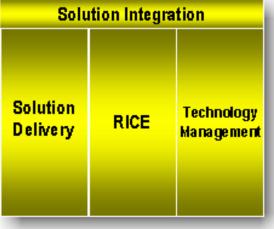


# Solutions Integration Team

#### Responsibilities

- Solutions Delivery Team Works With Process Blueprints to Configure, Build, and Test COTS Applications
- Reports, Interfaces, Conversions, and Extensions (RICE) Team Converts Data, Develops Reports and Interfaces, and Performs Other "Gap-filling" Development
- Technology Management Team Develops and Implements the Technical Architecture and Infrastructure to Support BSM Applications, and Provides Systems Administration

#### DLA Lead: Jim Kimberl



#### **Responsible for delivering an** Integrated / Interoperable BSM Solution



# Solutions Integration Methodology

Furthering the Blueprint to Deliver Required So

Blueprint (Concept Demo and Full Operational Capability) The Requirement

**Scenarios and Scripts - Solutions Delivery** 

**Issue Resolution - Solutions Delivery and** 

TEAM

Transition

· RICE & Chinology

**Solutions Delivery** 

Gap Definition - Solution Delivery and

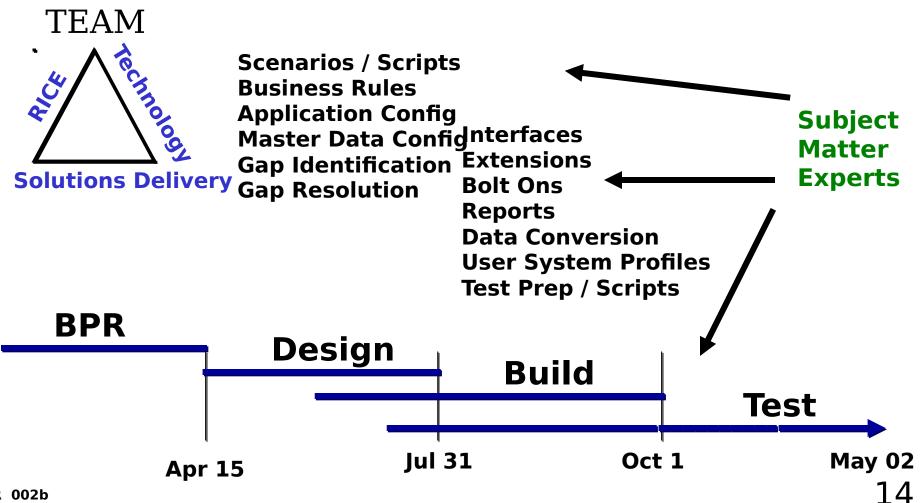
Gap Resolution – All 3 Teams Process Reengineering Extensions Conversions Interfaces / Bolt-ons

13

AR 002c



# Solutions Integration Methodology Furthering the Blueprint to Deliver Required So





Web Portal(s) **IA/Security Information Services** 

**Customer Direct** 







Customer Focused





S

0

pli

D S

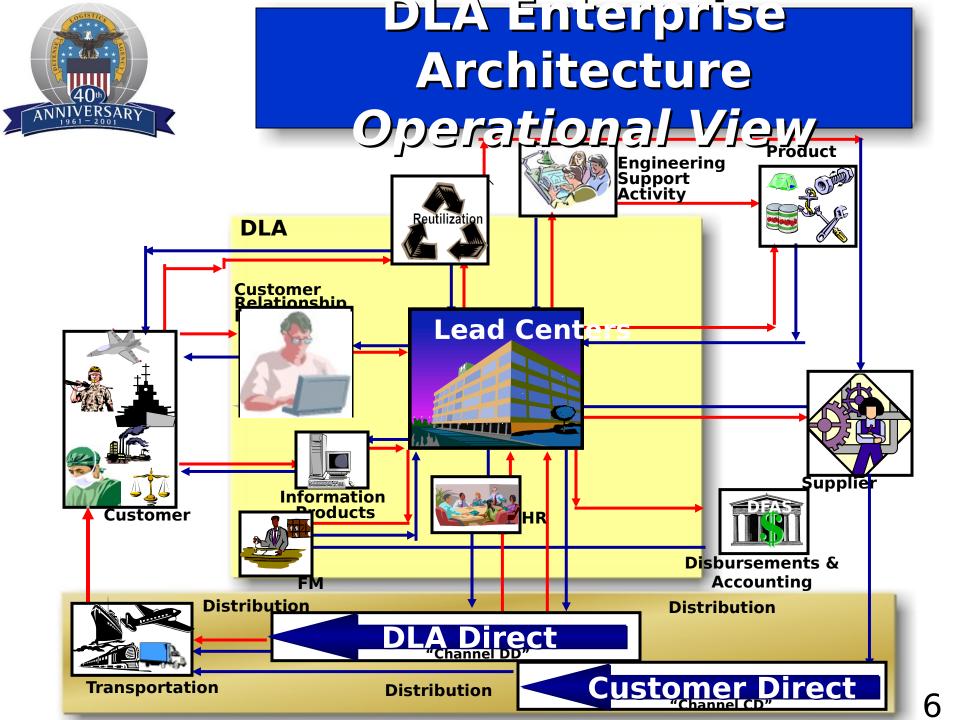
Common Processes Common Systems



Supply Chain **Partners** 

AR 001

15





### The Process: Reengineer by Fielding Best Practices

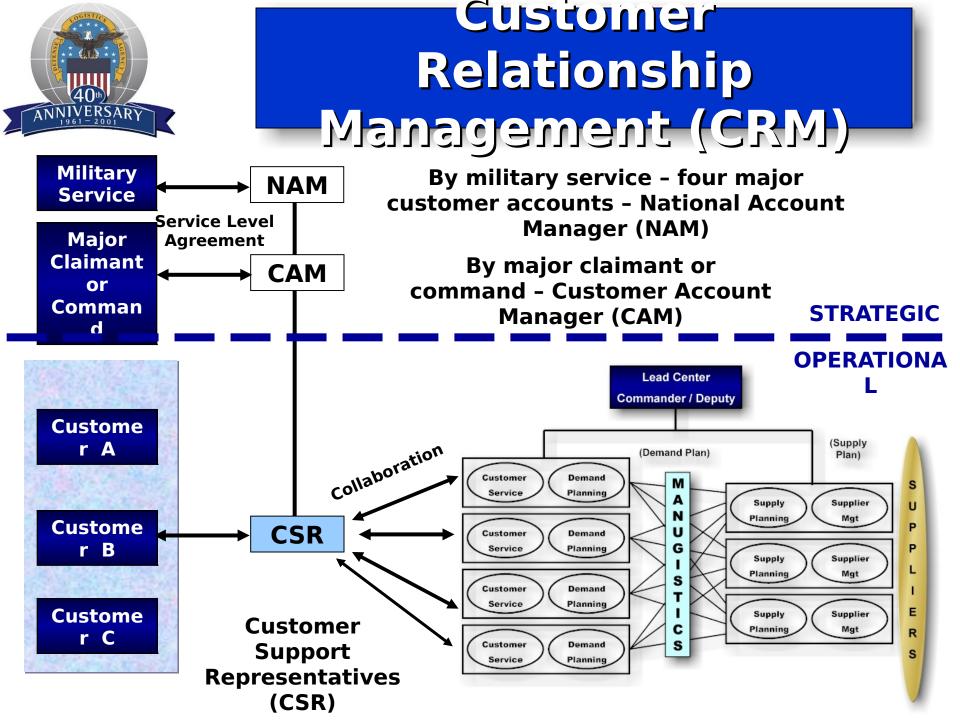
Planning • Demand by Customer • Collaboration • Time-phased Inventor Improve Customer Service • Budget Based on	Visibility • Variable Pri Provide
by Collaborating Plans	Best Value Financial
<ul> <li>Supplier S</li> <li>Supplier S</li> <li>Supplier S</li> <li>Management</li> <li>Capable to Promise</li> <li>Web-based</li> <li>Procurement</li> <li>Pay on Receipt</li> </ul>	<ul> <li>CFO Compliance</li> <li>Financials Integrated With Business Transactions</li> <li>Change in Inventory Valuation Methodology</li> </ul>



#### Goal for Design/Build/Test/ Deliver Concept Demo Phase

- Deliver a fully operational, tested system and trained workforce
- Fully support existing customer commitments
- Deliver greater than 8 of the Functional Requirement in the O
- Incorporate improved capabilities within timeframes/resources







Fine People: Providing the Training, Experience, and Opportunity to Succeed

- Business process changes affect:
  - How work will be done
  - Who does it
  - Organizational relationships to support it
- "Customer Driven" DLA Strategy direction affects how we face the customer



Roles

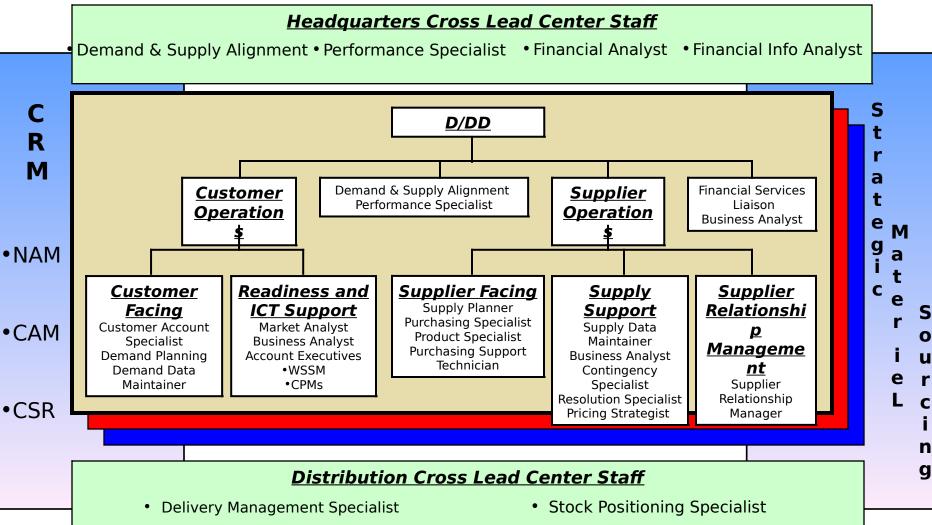
Jobs

Teams

Organization



## Standard Organization Structure

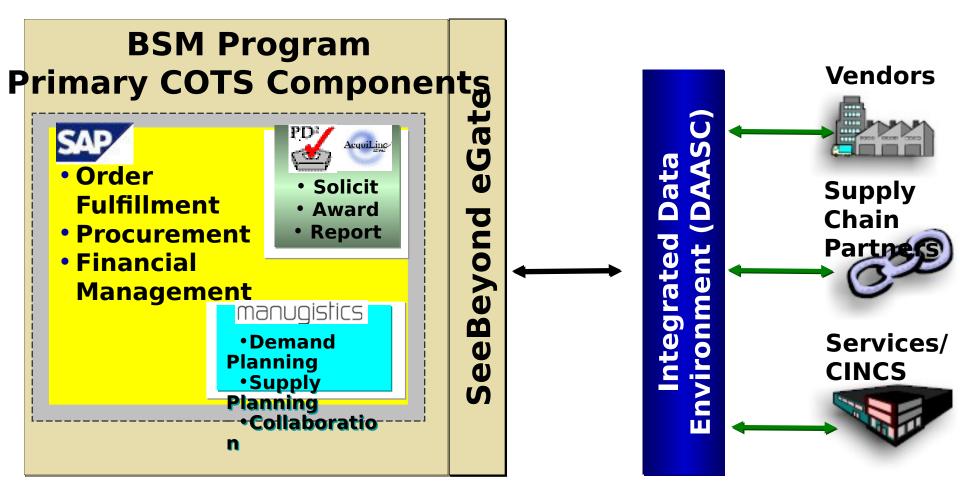


0

n

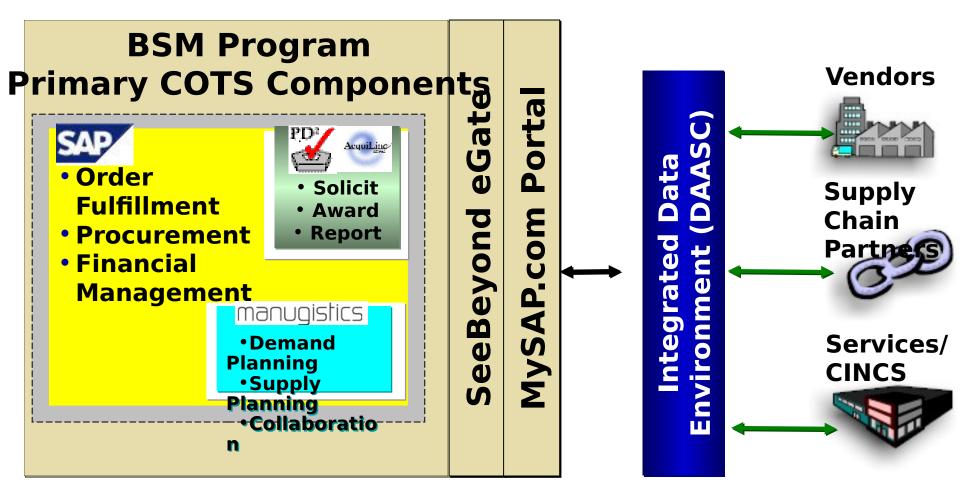


#### BSM Technical Blueprint The Core of DLA's Systems Architecture





#### BSM Fechnical Blueprint The Core of DLA's Systems Architecture





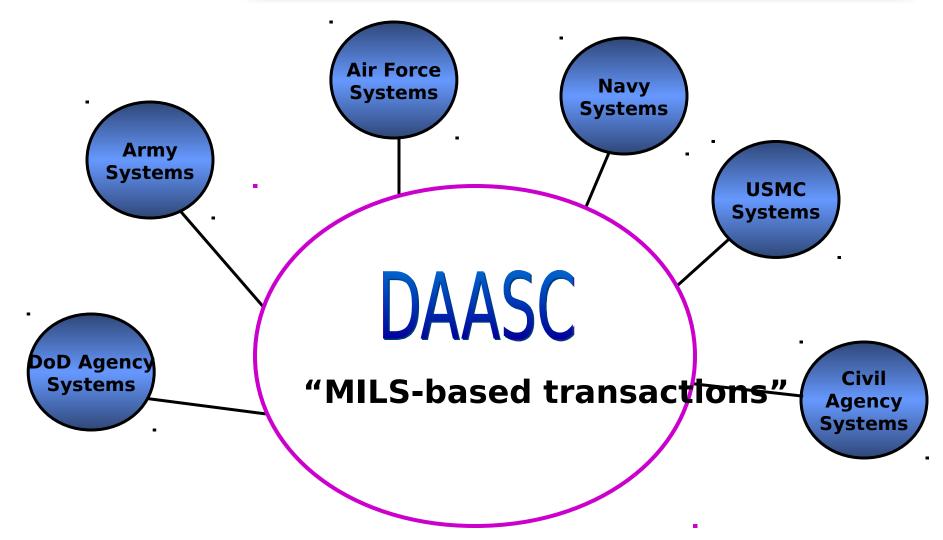
### What the Customer and Employee Will See

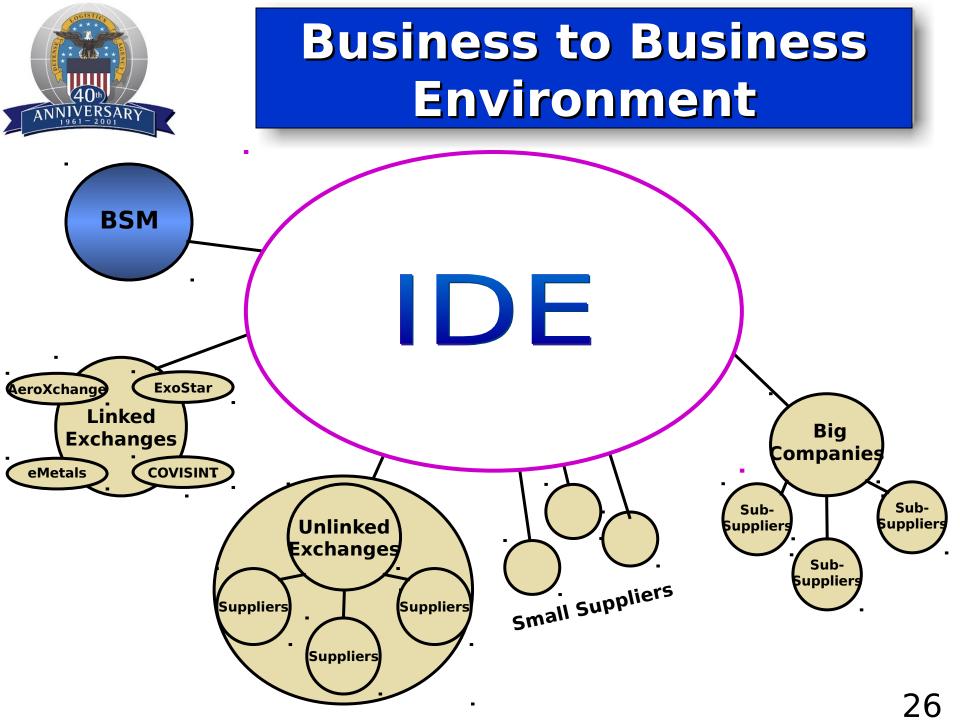
The BSM solution utilizes web-based technologies to access a secure BSM client-server architecture

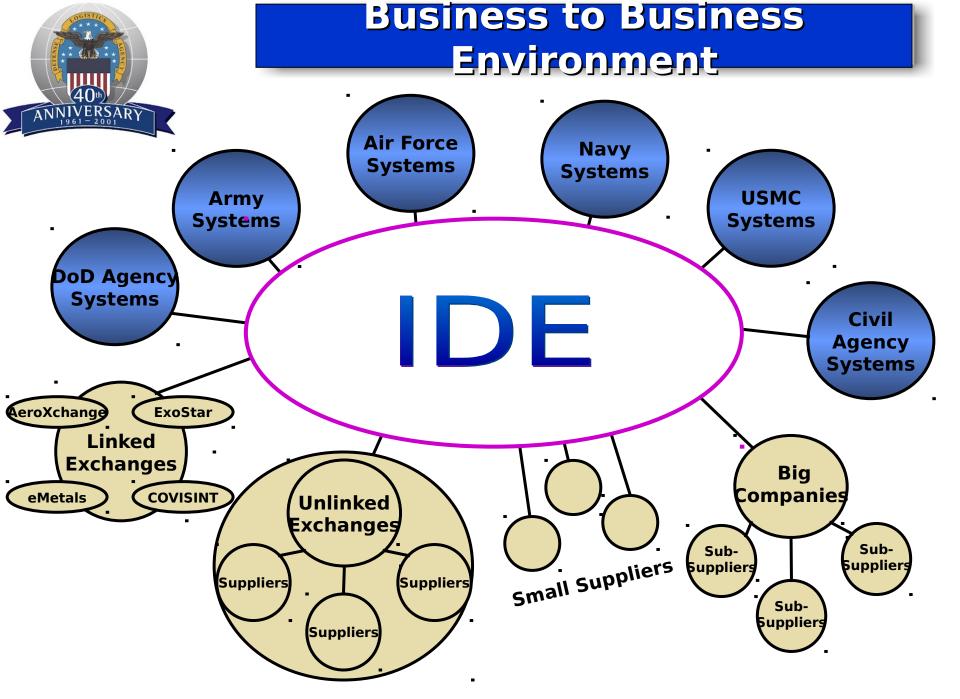
SAP	PD <sup>2</sup>	Manu	
	1		Purchase order       Edit       Goto       Environment       System       Help         Image: System       Image: System       Help       Image: System       Help       Image: System         Image: System       Image: System       Help
m	ySAP.com		Image: Second state of the second s
			Overdeliv. tol.       *       Unlimited       Reminder 1       Image: Goods         Underdel. tol.       *       Reminder 2       GR nor         Shipping instr.       Image: Goods       Image: Goods       Image: Goods         Stock type       Unrestricted use       Image: Goods       Image: Goods       Image: Goods         Stock type       Unrestricted use       Image: Goods       Image: Goods       Image: Goods       Image: Goods         Stock type       Unrestricted use       Image: Goods       Image: Goods       Image: Goods       Image: Goods       Image: Goods         Stock type       Unrestricted use       Image: Goods



# **Business to Business Legacy Environment**







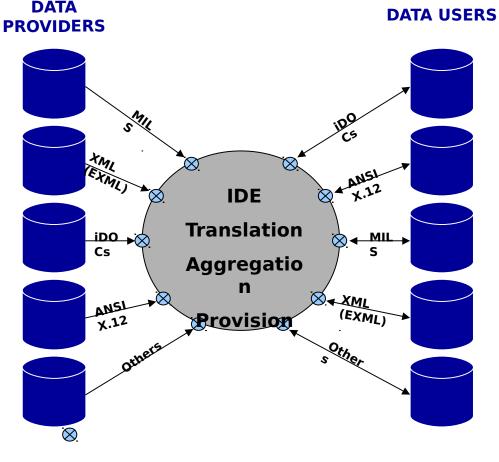


Why DoD Needs a Logistics Integrated Data Environment

- Builds on a foundation of success..."MILS"
- Allows modernization to be paced within service priorities and resource constraints
- Supports collaboration and cost sharing without impeding individual project schedules
- Promotes common business practices rather than standard system solutions
- Ensures continued interoperability by promoting standard business rules
- Similar to trading exchanges being embraced by industry
- Facilities "outsourcing" process versus systems



## IDE Data Translation Service



Interface (Reusable)

#### Capabilities

- Information exchange between and across services, agencies, industry, transporters, and financial institutions
- Provides common reach back capability to reference data
- Supports logistics processes such as requisition processing, order placement, invoicing, shipping, receipt, and returns
- Allows users/providers to conduct business 2



#### DoD Logistics Integrated Data Environment A Viable Migration Path

#### Yesterday 1960-1999

- Non-standard custom systems
- Interoperability supported by documented conventions and business rules
- Obsolete EDI formats constrained to DoD
- DAASC provided a viable and proven transaction hub

#### 2000-2005

- Separate ERP systems implementation
- Interoperability supported by documented conventions and business rules
- ANSI X.12 EDI formats open to commercial markets
- Repository and collaborative services to support IDOC/BAPI development
- DAASC provides a transaction hub and robust translation services

#### Tomorro w 2006+

- Integrated ERP systems
- Interoperability supported by documented conventions and business rules
- Repository and collaborative services to support development
- DAASC provides state of the art information exchange among

DoD and commercial

30



# An IDE Enables Achievement of...

- A logistics modernization constrained by the realities of resource availability
- Implementation of commercial exchange standards rather than proprietary information standards
- Supply Chain Management...end-to-end visibility
- True eBusiness (B2B), not just "browse and buy"
- Standard business rules..interoperability
- End-to-end logistics performance metrics (e.g., customer wait time)
- Incremental modernization and accelerated endt-end business process improvement



# Summary...Bottom Line

BSM is a great deal more than an IT project

...BSM is the catalyst to transform DLA by:

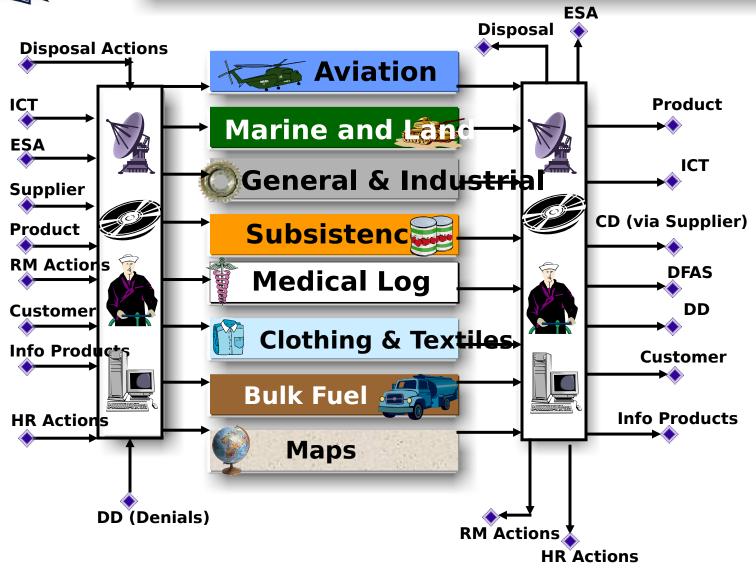
- Reengineering by fielding best practices
- Providing the capability to manage the supply chain ... factory to foxhole
- Improving service by focusing on customer and supplier relationships
- Providing the training, experience, and opportunity to succeed in this new environment
- Replacing legacy materiel management systems (SAMMS and DISMS) with COTS







## **Lead Centers Detail**





### **BSM Enterprise** Design **Order Fulfillment**

Process/Subprocess	SAP	Manugistics	PD <sup>2</sup>
Manage Customer Profile	X		
Process Customer Order	X		
Perform Availability Check	X	X	
Assign Pricing	X		
Process Backorders	X		
Manage Kitting	X	X	
Manage Delivery	X		
Manage Accounts Receivable	X		
Issue Invoices	X		
Collect Payments	X		PD <sup>2</sup>
R 023-1	SAP	manugistics	



### BSM Enterprise Design Order Fulfillment (Cont)

<b>Process/Subprocess</b>	SAP	Manugistics	PD <sup>2</sup>
Manage Customer Relation	nship		
<ul> <li>Manage Customer Requests</li> </ul>	X		
<ul> <li>Manage Customer Returns</li> </ul>	X		
Manage Inventory			
Receive Inventory	X		
Maintain Inventory	X		
<ul> <li>Manage Inventory Availability</li> </ul>	X	X	
Manage Asset Visibility	X		
Stock Transfers	X		pro: 🥖
Issue Inventory	SAP	manugistics	3



### BSM Enterprise Design Planning

Process/Subprocess	SAP	Manugistics	PD <sup>2</sup>
Manage Demand History		X	
<b>Capture Demand History</b>		X	
Develop Timed Phased Inventory Plan		X	
Generate Demand Forecast		X	
Create Supply Plan		X	
Evaluate Demand Plan Performance		X	
Optimize Distribution Network		X	









### BSM Enterprise Design Procurement

Process/Subprocess	SAP	Manugistics	PD <sup>2</sup>
Manage Master Data	X		
Manage Materiel Master	X		
Manager Vendor Master	X		X
Manage Purchasing Master Data	X		
Manage Purchase Requisition	X		X
Convert Supply Plan			X
Manage Solicitations			X
Determine Readiness Capability	X		
Receive and Evaluate Offer/Quote	SAP	manugistics	PÓ:



### **BSM Enterprise** Design **Procurement (Cont)**

<b>Process/Subprocess</b>	SAP	Manugistics	PD <sup>2</sup>	
Prepare Aware and Process Release Order	X		X	
Administer Award			X	
Manage Suppliers and Industrial Capacity	X	X	X	
Manage Accounts Payable				
Verify Invoice	X			
Process Payment	X			
Evaluate Vendor Performance	X		X	
Perform Independent Quality and Tech Review	X	manunichica	PD	
R 023-5	SAP	-manugistics	<u> </u>	



### BSM Enterprise Design Finance

Process/Subprocess	SAP	Manugistics	PD <sup>2</sup>		
Manage Budget					
<ul> <li>Plan and Formulate Budget</li> </ul>	X				
<ul> <li>Execute Funds Control</li> </ul>	X				
<ul> <li>Forecast Cash</li> </ul>	X				
General Ledger	X				
Cost Center Accounting	X				
Cost Allocation	X				
Profitability Analysis	X				









## **Clinger-Cohen Act** Enterprise Architecture

DLA is developing an Enterprise Architecture in close coordination with BSM Program. The BSM Solution forms the basis of the future DLA information architecture.

Purpose: Establish broad agency policy that implement: Addresses GAO use of enterprise architecture to guide and discipline IT Audit Audit

Support the identification and evaluation of programs

• and initiatives and system • and initial 16440 ure modern • All IT investments

Management

- Modernization Executive Board (oversight)
- J-6 Information Operations
  - IT Solutions
  - Operational, Systems, Technical Architecture
- J-1/J-3/J-8 (mission analysis/business practices)

Processes

- Architecture development in context of strategic planning, mission analysis, and systems life cycle processes.
- •Architecture enforcement through portfolio management process

Implementation Plan: sets forth objectives, strategy, responsibilities, and milestone



## Clinger-Cohen Act Incremental Investment

- DLA is conducting an incremental investment in BSM Program
- Overarching umbrella contract awarded with eleven separate task orders
- Modernization Executive Board to examine and approve award of each task order
- BSM Solution being developeAddresses GAO four releases/increments
   Audit
- Economic Analysis to examine R on Investment (ROI) by increment





# BSM security provides PKI and single sign-on capabilities to the BSM user

- Role based security across BSM applications
- DoD based PKI certification level 3 CERTS
- Single sign-on access to all BSM solutions
- COTS based solution
- Secure network communications (ports, firewalls, encryption)
- Intrusion detection
- Compliant with DoD Security Regulations



## Process Improvements -Demand Planning BSM

- Plan by Item
- Single/Static Forecast

**Today** 

- Quarterly Forecast
- Limited Customer Input
- Tabular Display
- No Fitted History/Forecast
- No User Interaction with Models
- Decentralized Systems

- Plan by Customer, Item, and Location
- Variable/Time Phased Demand Plan
- Monthly Planning Horizon
- Extensive Collaboration with Customer
- Graphical and Tabular Display
- Fitted History/Forecast
- User Interaction with Models
- Single Demand Planning System



- Forecast by Item
- Single Reorder Point Based
- Batch Execution Twice a Week
- Decentralized Systems

- Forecast by Item and Location (SKU)
- Time Phased Inventory Plan
- Daily and On-Demand Execution
- Single Supply Planning System

## 

- Multiple Contact Writing Applications
- Single Line Transactions
- Multiple Web-based Applications
- Batch Processing
- Invoice Required for Payment
- 8 Ledgers to Consolidate
- Inventory Valued at LAC Not GAAP Compliant

- Single Contact Writing Application
- Multi-line Transactions
- Common Web-based Solution
- Real Time Updates
- Pay on Receipt (ERS)
- Single General Ledger Using USSGL Chart of Accounts
- Inventory Valued at Moving Average
   Cost GAAP/ CFO Compliant



### Process Improvements -Orcler Fulfillment BSM

- Orders Processed
   "First In First
   Out"
- Single Line Orders

**Today** 

- Order Status Transactions
- Inventory Reconciliation Between SAMMS & DSS
- All Operations Costs
   Included in Cost Recovery
   Rate

- Orders Processed by "Required Delivery Date"
- Multi-line Orders
- On-line Account Visibility
- Synchronized Inventory Balances
- Premium Services

   (Transportation, Expedited
   Processing) and Discounts
   (Volume Purchase)